

REMARKS

Claims 1-22 were pending when last examined, all of which stand rejected. Claim 1 has been canceled. Claim 10, which depended on Claim 1 when last examined, is written in independent form.

The Response to Arguments in the Office Action of August 3, 2004 (“the Office Action”) suggests that a dental burr is synonymous with a lapping wheel. Applicants respectfully disagree with this characterization because using a dental burr is more like using a drill than using a lapping wheel. The size of the dental burr is such that only a portion of the surface that is being worked on is covered at a time. Due to only a portion of the surface being touched at a time, the dental burr process creates a cavity. The dental burr acts as a drill using sharp edges that are typically embedded with diamond to cut away at the material. If a dental burr were to be used to remove the material encapsulating a die and form a flat surface (e.g., for marking), multiple passes would be made. Even after multiple passes with the dental burr, the surface would not be as smooth and planar as that prepared with a lapping wheel. In contrast, a lapping wheel is larger than the dental burr and therefore does not create a cavity on the encapsulant surface. Rather, is capable of creating a planar surface that is smoother than the surface created by multiple passes with a dental burr. Thus, while the dental burr may be preferable to a lapping wheel in a situation that requires selective removal, it would be inferior to a lapping wheel when the surface is to be used for marking that is legible to the naked eye.

Although Applicants are requesting that the pending claims be reviewed in light of the above amendments, the amendments do not constitute an acquiescence that using a dental burr is a form of lapping. Rather, the amendments are requested in the interest of expediting the prosecution of this application.

Claim Rejections – 35 U.S.C. § 102

Claims 1-4, 8, 9, 13, and 21 are rejected under 35 USC § 102(b) as being anticipated by U.S. Patent No. 5,318,926 to Dlugokecki (“Dlugokecki”). Claim 1 is canceled and Claims 2-4, 8, 9, 13, and 21 are amended to depend from Claim 10.

Claim Rejections – 35 U.S.C. § 103

Claims 5 and 6

Claims 5 and 6 are rejected under 35 USC § 103(a) as being unpatentable over Dlugokecki and USP 6,680,220 to Minamio. Claims 5 and 6 now depend from Claim 10.

Claims 7, 11, and 15-17

Claims 7, 11, and 15-17 are rejected under 35 USC § 103(a) as being unpatentable over Dlugokecki in view of USP 6,566,234 to Capote. Claims 7, 11, and 15-17 now depend from Claim 10.

Claim 10

Claim 10 is rejected under 35 USC § 103(a) as being unpatentable over Dlugokecki and USP 6,080,602 to Tani et al (“Tani”). Claim 10 is patentable over Dlugokecki and Tani because it recites “reshaping the first encapsulated package and the second encapsulated package at the same time by using a lapping process.”

The Office Action states that “Tani discloses lapping is performed to permit more than one package to be lapped at the same time (see FIG. 3D).” Applicants respectfully disagree with this statement at least on two grounds. First, Tani’s FIG. 3D does not show lapping. In fact, Tani’s description of FIG. 3D refers to the leveling process as using dicing or grinding but never mentions the possibility of using a lapping process. Second, Tani does not show operating on more than one *package* at the same time. As recited in Claim 10, the second package is “encapsulated separately from” the first package. In Tani’s FIG. 3D, multiple chips (39) are in one package, encapsulated by a single mass of encapsulant (liquid resin 52). Thus, Tani’s FIG. 3D shows only one package being leveled at once. *After* the encapsulant is removed, the package is divided into separate units (see Tani’s FIG. 3E).

In contrast to Tani, the invention of Claim 10 pertains to simultaneously lapping two separate packages. Due to the fact that the packages that are being simultaneously lapped are deconstructed integrated circuit packages, the first package and the second package are physically separate units that are individually encapsulated. Typically, an encapsulated surface is convex or concave, not planar. Thus, the contours of two separately encapsulated units (e.g., two convex surfaces) are different than the contours of one large encapsulated unit (e.g., one

large convex surface). Given that the first and the second encapsulated packages are separate units, leveling is likely to be harder with grinding (which covers a smaller surface area than lapping) or dicing than with lapping.

Claim 12, 14, 18-20, and 22

Applicants respectfully request reconsideration of the claims in light of the above amendment and the following remarks.

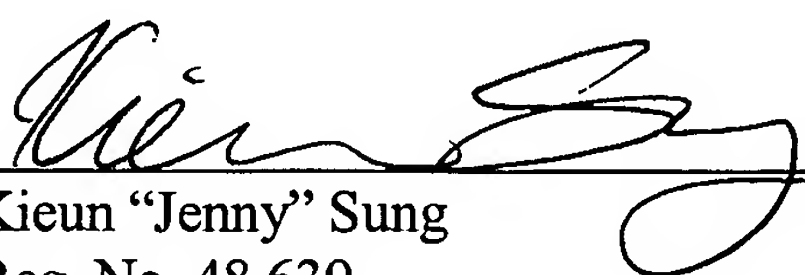
Conclusion

Applicants request reconsideration of Claims 2-22 in light of the above amendments and remarks. If the Examiner wishes to discuss any aspect of this application, the Examiner is invited to telephone Applicants' undersigned attorney at 650-833-2121.

Any fee due for this Amendment may be charged to Deposit Account No. 07-1896.

Respectfully submitted,

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Kieun "Jenny" Sung
Reg. No. 48,639
Attorney for Applicants

GRAY CARY WARE & FREIDENRICH LLP
2000 University Avenue
East Palo Alto, CA 94303-2248
(650) 833-2000

KJS